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(FILE 'HOME' ENTERED AT 14:52:45 ON 23 MAR 1998)

FILE 'FSTA, WPIDS, USPATFULL' ENTERED AT 14:53:07 ON 23 MAR 1998

L1 39 S (MILK? OR DAIRY) (100A) (((OMEGA OR W) (W) 3) (2A) (FATTY(W)A
L2 38 DUPLICATE REMOVE L1 (1 DUPLICATE REMOVED)
L3 23 S (MILK? OR DAIRY) (15A) (((OMEGA OR W) (W) 3) (2A) (FATTY(W)AC

=> s 5698244/pn or 5656319/pn or 5340594/pn or 5130242/pn or 5340742/pn or 5518918/pn or 5688500/pn

1 5698244/PN
1 5656319/PN
1 5340594/PN
1 5130242/PN
1 5340742/PN
1 5518918/PN
1 5688500/PN

L2 7 5698244/PN OR 5656319/PN OR 5340594/PN OR 5130242/PN OR 534

074

2/PN OR 5518918/PN OR 5688500/PN

=> s milk?/cl

WARNING - FIELD CODE NOT VALID 'CL'

L3 0 MILK?/CL

=> s milk?/cls

L4 0 MILK?/CLS

=> s milk?/claims

WARNING - FIELD CODE NOT VALID 'CLAIMS'

L5 0 MILK?/CLAIMS

=> s milk? or cow? or sheep or goat# or bison# or buffalo? or antelope# or deer# or camel?

32665 MILK?
16918 COW?
11033 SHEEP
8921 GOAT#
107 BISON#
1883 BUFFALO?
97 ANTELOPE#
2090 DEER#
1700 CAMEL?

L6 61207 MILK? OR COW? OR SHEEP OR GOAT# OR BISON# OR BUFFALO? OR AN

TEL

OPE# OR DEER# OR CAMEL?

=> s 16 and 12

L7 1 L6 AND L2

=> d

1. 5,698,244, Dec. 16, 1997, Method for raising animals having high concentrations of omega-3 highly unsaturated fatty acids; William R. Barclay, 426/2, 53, 635, 807 [IMAGE AVAILABLE]

> d all

L27 ANSWER 1 OF 1 CAPLUS COPYRIGHT 1998 ACS
AN 1989:532569 CAPLUS
DN 111:132569
TI Manufacture of .OMEGA.-3 lipids by eukaryotic marine microorganisms.
IN Long, Thomas Veatch, II
PA Maricultura, Inc., USA
SO PCT Int. Appl., 14 pp.
CODEN: PIXXD2
PI WO 8900606 A1 890126
DS W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO,
SD, SU, US
RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL,
SE, SN, TD, TG
AI WO 88-US2483 880720
PRAI US 87-75662 870720
DT Patent
LA English
IC ICM C12P007-64
ICS C09F005-02; A61K007-00
CC 16-2 (Fermentation and Bioindustrial Chemistry)
Section cross-reference(s): 17, 62, 63
AB .omega.-3 (N-3) fatty acids are manufd. by heterotrophically
culturing obligate and facultative marine eukaryotic microorganism.
Thraustochytrids were cultured in a saline culture medium
contg. glucose 1.0-5.0 and yeast ext. 0.1 g in 100 mL aged seawater,
pH 7-7.5, with shaking, for 2 wks at 25-28.degree.. The cells were
harvested by centrifugation or freeze drying, extd. with
MeOH/CHCl3/H2O (2:1:0.8) for 0.5-3 h, and again extd. by the addn.
of CHCl3 and H2O to give MeOH/CHCl3/H2O = 2:2:1.8 and a CHCl3 ext.
of fatty acids contg. up to 10-50% .omega.-3 fatty acids was
obtained.
ST fatty acid heterotropic fermn thraustochytrid; yeast fatty
acid heterotropic fermn; microalgae fatty acid fermn; fungi fatty
acid fermn; marine eukaryote microorganism fatty acid
IT Yeast
(halophilic marine, .omega.-3 fatty acids manuf. with)
IT Cosmetics
Pharmaceuticals
(manuf. of .omega.-3 fatty acids for, with eukaryotic marine
microorganisms)
IT Fermentation
(.omega.-3 fatty acid, with marine eukaryotic microorganism)
IT Feed
(.omega.-3 fatty acids as additive for , manuf. with marine
eukaryotic microorganisms for)
IT Feed
(.omega.-3 fatty acids for , manuf. with marine eukaryotic
microorganisms of)
IT Thraustochytrium
(.omega.-3 fatty acids manuf. with)
IT Fungi
(marine, lower halophilic, .omega.-3 fatty acids manuf. with)
IT Fatty acids, preparation
RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP
(Preparation)
(polyunsatd., n-3, manuf. of, with eukaryotic marine
microorganisms)

L11 ANSWER 1 OF 1 FSTA COPYRIGHT 1998 IFIS
 AN 88(12):P0056 FSTA FS FSTA
 TI [Studies on transfer of .omega.-3 fatty acids into
 bovine milk fat.]
 Zum Transfer von Omega-3-Fettsauren in das MilCHFett bei
 Kuhen.
 AU Hagemeister, H.; Precht, D.; Barth, C. A.
 CS Inst. fur Physiol. und Biochem. der Ernahrung, Bundesanstalt fur
 MilChforschung, Kiel, Federal Republic of Germany
 SO MilChwissenschaft, (1987) 43 (3) 153, 155-158, 20 ref.
 ISSN: 0026-3788.
 DT Journal
 LA German SL English
 AB A milk fat enriched with .omega.-3 fatty acids may be of
 interest for the prevention of cardiovascular disease. There has
 been controversy over whether and, if so, how much of the long-chain
 polyunsaturated .omega.-3 fatty acids in marine oils can
 be utilized by the bovine mammary gland for milk fat
 synthesis, even if they are protected from biohydrogenation by rumen
 microflora. 2 lactating cows received infusions of 220-420 g
 menhaden oil/day for 28 and 43 days, resp. The mean depression of
 milk fat and protein content was 0.5 and <0.2%, resp.; 35-40% of the
 infused .omega.-3 fatty acids were transferred to milk
 fat. Trans fatty acid content of C18-isomers was never >5% by wt.
 It is concluded that a surprisingly efficient transfer of long-chain
 polyunsaturated fatty acids of marine oils into bovine
 milk fat is possible. (PDW)
 CC P (Milk and Dairy Products)
 IT Oils fish; milk fats, fish oils and .omega.-3 fatty acids
 in
 IT Fatty acids; milk fats, fish oils and .omega.-3 fatty
 acids in
 IT Fats milk; milk fats, fish oils and .omega.-3 fatty acids
 in
 IT Dairy products

=> d all

L25 ANSWER 1 OF 1 CAPLUS COPYRIGHT 1998 ACS
AN 1969:410511 CAPLUS
DN 71:10511
TI Polyunsaturated fatty acids of aquatic fungi: possible phylogenetic
significance
AU Ellenbogen, Barbara B.; Aaronson, S.; Goldstein, S.;
Belsky, M.
CS Haskins Lab., New York, N. Y., USA
SO Comp. Biochem. Physiol. (1969), 29(2), 805-11
CODEN: CBCPAI
DT Journal
LA English
CC 8 (Microbial Biochemistry)
AB Fatty acids of four marine fungi *Thraustochytrium roseum*,
T. aureum, *Schizochytrium aggregatum*, and *Dermocystidium*
species and one freshwater fungus *Phlyctochytrium punctatum* were
detd. These fungi synthesized .omega. 3 and .omega. 6 polyunsatd.
fatty acids. They contained large quantities of C20 and C22
polyenes, and three of the marine fungi contained unusually large
amts. of C22:6 fatty acid. Major fatty acids for *T. roseum* and *S.*
aggregatum were palmitic, oleic, and docosahexaenoic acids; for *T.*
aureum, palmitic, docosapentaenoic, and docosahexaenoic acids; for
Dermocystidium, palmitic, palmitoleic, and eicosadienoic acids; for
P. punctatum, palmitic, stearic, oleic, and linoleic acids. The
pattern of biosynthesis of polyunsatd. fatty by these aquatic fungi
as well as their morphology supports the hypothesis that they
evolved from a primitive phytoflagellate (monad) ancestor.
ST fungi unsatd fatty acids; fatty acids unsatd fungi; marine fungi
fatty acids
IT *Schizochytrium*
(aggregatum, fatty acids of, phylogeny in relation to)
IT Fungi
(fatty acids of marine, phylogeny in relation to)
IT *Dermocystidium*
Thraustochytrium
(fatty acids of, phylogeny in relation to)
IT Evolution
(of fungi, unsatd. fatty acids in relation to)
IT *Phlyctochytrium*
(punctatum, fatty acids of, phylogeny in relation to)
IT Fatty acids, biological studies
RL: BIOL (Biological study)
(unsatd., of fungi, phylogeny in relation to)
IT 57-10-3, biological studies 57-11-4, biological studies 60-33-3,
biological studies 112-80-1, biological studies 373-49-9
25167-62-8 25448-00-4 25448-01-5
RL: BIOL (Biological study)